DOCUMENT RESUME

ED 356 092 PS 021 340

AUTHOR Rabiner, David L.; Keane, Susan P.
TITLE Children's Perception of Their Treatment by Peers in Relation to Their Sociometric Status.
PUB DATE Mar 93
NOTE 16p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (60th, New Orleans, LA, March 25-28, 1993).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Affective Behavior; *Age Differences; Childhood Attitudes; *Children; Comparative Analysis; Depression (Psychology); Elementary Education; Elementary School Students; *Peer Acceptance; *Peer Relationship; Self Concept; Self Esteem; Social Cognition
IDENTIFIERS Peer Perception Inventory; Self Report Measures; *Sociometric Status

ABSTRACT

This study examined age-related changes in the relationship between children's perceptions of how peers treat them, their affective distress, and their position within the peer group. Subjects were 380 boys and girls (163 second graders and 217 fifth graders) from 4 Greensboro, North Carolina, elementary schools. Children's sociometric status was determined using a procedure developed by J. D. Coie, K. A. Dodge, and H. Coppotelli. Children also completed the Peer Perception Inventory and an 18-item self-report inventory of depression. Analysis revealed that higher levels of social acceptance were associated with more positive perceptions of one's treatment by peers, and this relationship appeared stronger for older children. Similarly, children with higher victimization scores reported less positive treatment by peers, and this relationship was also stronger within the older sample. Victimized rejected children reported less positive treatment by peers as grade increased, and by the fifth grade these children's reports were markedly different from any other status group. For aggressive rejected children, however, the pattern was reversed, as their report of how peers treated them increased substantially from grade two to five. Results of this study suggest interesting age-related changes in the associations between children's status, perceptions of treatment by peers, and affective distress. (MM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED356092

Children's Perception of their Treatment by Peers in Relation to their Sociometric Status

David L. Rabiner Susan P. Keane

University of North Carolina at Greensboro

Paper presented at the bienniel meeting of the Society for Research in Child Development, New Orleans, 1993.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
David L. Rabiner
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 021340

BEST COPY AVAILABLE

Children's Perception of their Treatment by Peers in Relation to their Sociometric Status

In considering the types of "social signals" a child is presented with by his or her peers, the peer group's behavior towards each of it's members is an important place to begin. Clearly, there is tremendous variability in how children behave towards different peers, and this variability is likely to be associated with children's sociometric status. For example, it is reasonable to assume that peers would display generally positive behavior towards popular children, while rejected children would tend to receive more aversive treatment, and several observational studies have documented differences in how peers respond to popular and unpopular classmates (Putallaz & Gottman, 1981; Gottman, Gonso, & Rasmussen, 1975; Coie & Kupersmidt, 1983).

Although knowledge of how peers behave towards their rejected classmates provides valuable information on what the social experience of unpopular children is like, each child's perception of how peers act towards him or her is also important to consider. Surprisingly, however, relatively little work has been done in this area. In work related to this issue, evidence has been presented that some rejected children, particularly those who are also aggressive, tend to overestimate their status with peers and report relatively little distress about their social relationships. Nonaggressive rejected children, in contrast, particularly those who are "easy to push around" (i.e. submissive rejected children) tend to report significant levels of social distress (Asher, Zelis, Parker, & Bruene, 1991; Patterson, Kupersmidt, & Griesler, 1990). In recent work from our own lab that relates to this issue (Rabiner, Keane, & MacKinnon-Lewis, 1993), we examined how children's general beliefs about peers were related to their sociometric status. Consistent with the findings presented above, aggressive rejected children reported generally positive beliefs about what peers are like, while submissive rejected children held general beliefs about peers that were decidedly negative.

In the present study, we sought to extend on this work in several ways. First, rather than assessing children's general beliefs about peers we examined children's perceptions of how peers act specifically towards them. As in our prior work, we expected that rejected children who are frequently victimized by peers would report that peers behave towards them in negative ways. We were less certain, however, about how aggressive rejected children would respond to questions about their treatment by peers. Dodge's work (Dodge,1980) on the attributional biases displayed by aggressive rejected children suggests that they would report negative treatment by peers, since they are prone to believe that others have acted towards them with hostile intent. The fact that they tend to report little distress about their peer relationships, however, suggests that they may not feel mistreated by peers.

A second important difference from our prior work is that we examined the relationship between sociometric status and social perceptions at two different grade levels. Specifically, we assessed this relationship in samples of 2nd and 5th graders so that age related changes in the relationship between children's perceptions of their treatment by peers and their sociometric status could be assessed. We anticipated that differences between victimized rejected children and nonrejected children would be greater among 5th graders, since at older ages they may have been subjected to negative treatment for a longer period.

Finally, we also assessed children's self-report of affective distress and depressive symptoms. This was done so that the relation between social acceptance, perceptions of treatment by peers, and emotional distress could be examined. We anticipated that stronger relationships between these variables would be found in the older cohort, and that victimized rejected children would report greater levels of affective distress.

METHOD

Subjects - Three hundred and eighty boys and girls (163 2nd graders and 217 5th graders) from 4 Greensboto, NC elementary schools served as participants. Approximately seventy percent of the sample was black; males and females were represented in relatively equal numbers. Parents of all participants had received a letter describing the study, and were asked to inform their child's principal if their child could not participate. Very few parents objected to their child's participation, and nearly all available children took part in the study.

Procedure - The data reported below were collected during a single session that took place in children's classrooms. Children's sociometric status was determined using the procedure described by Coie, Dodge, and Coppotelli (1982). In addition to the standard "like most" and "like least" nominations, children were asked to identify three grademates who "start fights" as well as three grademates who get "picked on and teased" so that aggressive and victimized subgroups of rejected children could be identified (see below).

After collecting the sociometric information, children completed 2 additional measures. The first, which we called the Peer Perception Inventory (PPI), was a 12 item measure designed to assess children's perceptions of how peers treat them. Six items were designed to assess perceptions of being treated positively by peers (i.e. "How much do the kids in your school act friendly and nice to you?"), and six items were intended to assess perceptions of being treated poorly (i.e. "How much do the kids in your school boss you around?"). Children responded to each item on a '1' (not at all) to '5' (very much) scale. Negative items were reverse scored and responses to the 12 items were summed to obtain a total score that could range from 12 to 60. (Higher scores indicated more positive views of one's treatment by peers.) Adequate levels of internal consistency were obtained for each grade level (i.e. alpha = .77 for 2nd graders and .89 for 5th graders).

After completing the PPI, children were given an 18 item self-

report inventory of depression developed by Birelson (1981). Each item is rated on a 3 point scale, so total scores could range from 18 to 54. (Higher scores indicate increased levels of affective distress and depressive symptoms.) The obtained alphas on this measure were .60 and .77 for 2nd and 5th graders respectively. For the 2nd grade sample, therefore, only a marginally adequate level of internal consistency was found. The results reported below should be interpreted with this in mind.

Children's sociometric status classification was determined using the guidelines sugested by Coie et. al. (1982). Within the rejected group, children were considered aggressive rejected if their Z score for "starts fights" was > 1.0, and victimized rejected if their Z score for "picked on and teased" was > 1.0. Rejected children not meeting either criterion were considered a "regular" rejected group. Very few children (i.e. only four 2nd graders and no 5th graders) were more than one SD above the mean on both nomination items, and were not included in the categorical analyses described below.

The distribution of rejected subtypes within each group grade is shown in table 1. As seen in this table, the percentage of rejected children who are also frequently picked on and teased increases from 2nd to 5th grade (i.e. from 14% to 37%). The absence of any rejected children who are both highly aggressive and highly victimized in the 5th grade group is also interesting. Apparently, this combination of attributes is extremely rare among older children.

RESULTS

Prior to examining sociometric status differences in children's perceptions of their treatment by peers, the associations between standardized measures of social preference, aggression, victimization, PPI scores, and depressions scores were computed for each grade. Correlations among these variables for the 2nd grade sample are shown in Table 2.

As expected, higher social preference scores were associated with more positive perceptions of treatment by peers, although this relationship was quite modest. A modest negative association between PPI scores and victimization was also found, as children with higher victimization scores reported more negative treatment by peers. The relationship between children's aggression and their PPI scores was not significant, however, and it is also interesting that self-reported depression was not correlated with any of the sociometric measures at this grade. Children's reports of depressive symptoms were correlated, however, with their perceptions of how peers treat them, as children reporting greater affective distress had less positive perceptions of their treatment by peers. Finally, it is interesting that children's victimization and aggression scores are positively correlated. Apparently, 2nd graders who peers regard as aggressive are also seen as being frequently picked on and teased.

The relationships among these variables for the 5th grade sample are shown in Table 3. As with the 2nd graders, the expected associations between children's PPI scores, social preference

scores, and victimization scores were found. Among the 5th graders, however, these relationships were somewhat stronger. Unlike the 2nd graders, a modest but significant association between children's aggression and PPI scores was also found, although this was in the opposite direction of what would be predicted. Specifically, higher levels of aggression tended to be associated with more positive perceptions of one's treatment by peers. Another difference from the 2nd grade sample is that children's self-reported distress was also associated with their position within the peer group - i.e. children with lower acceptance scores and higher victimization scores reported higher levels of affective distress. Finally, unlike the case for 2nd graders, no association between nominations for aggression and victimization was found.

We also examined status related differences in children's PPI scores and depression scores using a status X grade ANOVA in which race and gender were controlled for. Status group means on the PPI at each grade are displayed in Table 4. Although a significant status effect was found, $F(4,209) = 5.04$, $p < .001$, this was qualified by a significant status X grade interaction, $F(4, 209) = 3.06$, $p < .02$. The nature of this interaction is clearly evident in Figure 1. As can be seen, PPI scores for average status children are highly similar for 2nd and 5th graders. For aggressive rejected children, in contrast, there is a sharp increase from grades 2 to 5, with aggressive 5th graders reporting much more positive treatment by peers than aggressive 2nd graders. Among the victimized rejected children, the situation is reversed, with 5th graders reporting less positive treatment than 2nd graders. Although it should be stressed that the number of children in the different rejected subgroups at each grade is small, the size of the group differences is actually quite large. For example, among the 5th graders, the mean difference between aggressive and victimized rejected children is nearly 2 standard deviations.

Table 5 shows the status group means on the depression measure for each grade level. In contrast to the results just presented, only a marginally significant status effect was found, $F(4,209) = 2.21$, $p < .07$, and the interaction of status and grade was not significant. It should be noted, however, that the pattern of results was similar to that found for children's perceptions of their treatment by peers. Specifically, for the 2nd grade sample, depression scores for victimized rejected children are quite similar to those of other children. For the 5th graders, however, the mean depression score for the victimized rejected group is approximately one standard deviation higher than that of average, popular, and aggressive rejected children.

DISCUSSION

In this study, we examined age related changes in the relationship between children's perceptions of how peers treat them, their affective distress, and their position within the peer group. Several interesting findings emerged. As expected, higher levels of social acceptance were associated with more positive

perceptions of one's treatment by peers, and this relationship appeared stronger for older children. Similarly, children with higher victimization scores reported less positive treatment by peers, and this relationship was also stronger within the older sample. No comparable associations between children's aggression and their PPI scores were found. In fact, more aggressive 5th graders tended to reported that peers treated them better. Although children's report of affective distress and their perception of how peers treat them was similar at each grade, significant associations between self-reported depression, social acceptance, and victimization were found only among 5th graders.

The results in relation to children's sociometric status were also interesting, and parallel those summarized above. As predicted, victimized rejected children reported less positive treatment by peers as grade increased from 2 to 5, and by the 5th grade, these children's reports were markedly different from any other status group. Although results for the depression measure were less robust, a similar pattern emerged. For aggressive rejected children, in contrast, the pattern was reversed, as their report of how peers treat them increased substantially from grade 2 to 5.

Although one must be extremely cautious about drawing developmental conclusions from cross-sectional data, it is interesting to speculate about the possible developmental implications of these results. Because status tends to be relatively unstable at younger ages (Coie & Dodge, 1983), 2nd grade children are in the midst of establishing their position within the social hierarchy, and their position is still fairly malleable. The fact that aggression and victimization were positively associated in this age group, along with the smaller percentage of rejected children who were highly victimized, suggests that children who get picked on are those who also tend to start fights, and very few children at this age are in the role of victimized outcasts. With increasing age, however, a larger percentage of rejected children become frequently victimized and their unfortunate position within the peer group is likely to be more stable. The absence of any association between aggression and victimization among 5th graders may also indicate that they are less likely to fight back when treated poorly. Not surprisingly, therefore, they seem to be painfully aware of being treated poorly, and there was some indication that this is beginning to be associated with an increase in depressive symptoms as well.

The possible developmental progression for aggressive rejected children is also interesting. Because the combination of aggression and rejection is known to be fairly stable even at younger ages (Cillessen, van IJzendoorn, van Lieshout, & Hartup, 1992), it is reasonable to speculate that these children actually became increasingly positive in their views of how peers treat them with advancing age. What could account for this? One possibility is that their aggressive behavior serves to intimidate peers, who respond by deferring more to these children over time. Thus, they may be providing a largely accurate account of how peers act towards them, and be relatively unaware of more subtle indications that they are disliked. Alternatively, they may be providing a

defensively biased account of how peers treat them, although it should be noted that this did not seem to be true for the aggressive rejected 2nd graders, and it is unclear why these children would become more defensive with advancing ages. In any event, the results for aggressive rejected fifth graders are consistent with the absence of social distress in this group that has been reported by other researchers (Boivin & Begin 1988; Patterson, Kupersmidt, & Griesler, 1990).

Another interesting aspect of the results for aggressive rejected 5th graders is how inconsistent it appears to be with the hostile attributional bias that is known to characterize such children. That is, how can aggressive rejected children report that peers tend to treat them quite well, and yet be so prone to assume that others have acted towards them with hostile intent? One possible explanation is that the attributional bias of aggressive rejected children is most evident in situations where they have been ambiguously provoked, and where they may thus be affectively aroused. Under conditions of perceived threats to the self their ability to process social information in a non-biased manner is adversely affected (Dodge & Somberg, 1987) which may override their generally held belief that peers treat them well. Clearly, additional research is necessary to better understand this apparent inconsistency.

In summary, results of the current study suggest interesting age related changes in the associations between children's status, perceptions of treatment by peers, and affective distress. Additional research in which larger samples of children are followed longitudinally is necessary, however, before the meaning of these age related changes can be more acccurately determined.

REFERENCES

Asher, S.R., Zelis, K.M., Parker, J.G., & Bruene, C.M. (1991). Self-referral for peer relations problems among aggressive and withdrawn low-accepted children. Paper presented at the biennial meeting of the Society for Research in Child Development, Seattle.

Birelson, P. (1981). The vaalidity of depressive disorder in children and the development of a self-rating scale: A research project. Journal of Child Psychology and Psychiatry, 22, 73-78.

Boivin, M., & Begin, G. (1989). Peer status and self-perceptions among early elementary school children: The case of the rejected child. Child Development, 60, 591-596.

Cillessen, A.T., van IJzendoorn, H.W., van Lieshout,C.F.M. & Hartup, W.W. (1992). Heterogeneity among peer rejected boys: Subtypes and stabilities. Child Development, 63, 893-905.

Coie, J.D., Dodge, K.A., & Coppotelli, H. (1982). Dimensions and types of soc ial status: A cross age comparison. Developmental Psychology, 18, 557-571.

Coie, J.D., & Dodge, K.A. (1983). Continuities and changes in children's social status: A five-year longitudinal study. Merrill-Palmer Quarterly, 29, 261-282.

Coie, J.D., & Kupersmidt, J. (1983). A behavioral analysis of emerging social status in boys' groups. Child development, 54, 1400-1416.

Dodge, K.A. (1980). Social cognition and children's aggressive behavior. Child Development, 54, 1386-1399.

Dodge, K.A., & Somberg, D.R. (1987). Hostile attributional biases are exacerbated under conditions of threats to the self. Child Development, 58, 213-224.

Gottman, J.M., Gonso, J., & Rasmussen, B. (1975). Social interaction, social competence, and friendship in children. Child Development, 55, 1969-1982.

Patterson, C.J., Kupersmidt, J.B., & Griesler, P.C. (1990). Children's perceptions of self and of relationships as a function of sociometric status. Child Development, 61, 1335-1349.

Putallaz, M., & Gottman, J.M. (1981). An interactional model of children's entry into peer groups. Child Development, 52, 402-408.

Rabiner, D.L., Keane, S.P., & MacKinnon-Lewis, C. (1993). Children's beliefs about familiar and unfamiliar peers in to their sociometric status. Developmental Psychology, 29, 236-243.

Table 1

Number and (%) in Each Rejected Subgroup by Grade

	Grade 2	Grade 5
Aggressive rejected	6 (27%)	6 (22%)
Victimized rejected	3 (14%)	10 (37%)
Regular rejected	9 (41%)	11 (41%)
Aggressive/Victimized rejected	4 (18%)	0 (0%)

Table 2

Correlations for 2nd Graders

	SP	VIC	AGG	PPI
SP	x	-.38***	-.49***	.16*
VIC	x	x	.39***	-.20 **
AGG	x	x	x	-.11
DEP	-.06	.08	-.10	-.48***

* - $p < .05$

** - $p < .01$

*** - $p < .0001$

SP = standardized social preference score

VIC = standardized victimization score

AGG = standardized aggression score

PPI = score on Peer Perception Inventory

DEP = depression score

Table 3

Correlations for 5th Graders

	SP	VIC	AGG	PPI
SP	x	-.49***	-.31***	.30***
VIC	x	x	.01	-.39***
AGG	x	x	x	.15*
DEP	-.19**	.24**	-.03	-.53***

* - $p < .05$

** - $p < .005$

*** - $p < .0001$

Table 4

Mean Scores on PPI by Sociometric Status

	Grade 2	Grade 5
Average	46	47
Popular	46	50
Aggressive rejected	36	49
Victimized rejected	40	32
Regular rejected	46	41

Scores are rounded to nearest whole number

Standard deviation = 8.6 for Grade 2 and 8.7 for Grade 5

FIGURE 1

PPI Score by Grade and Status

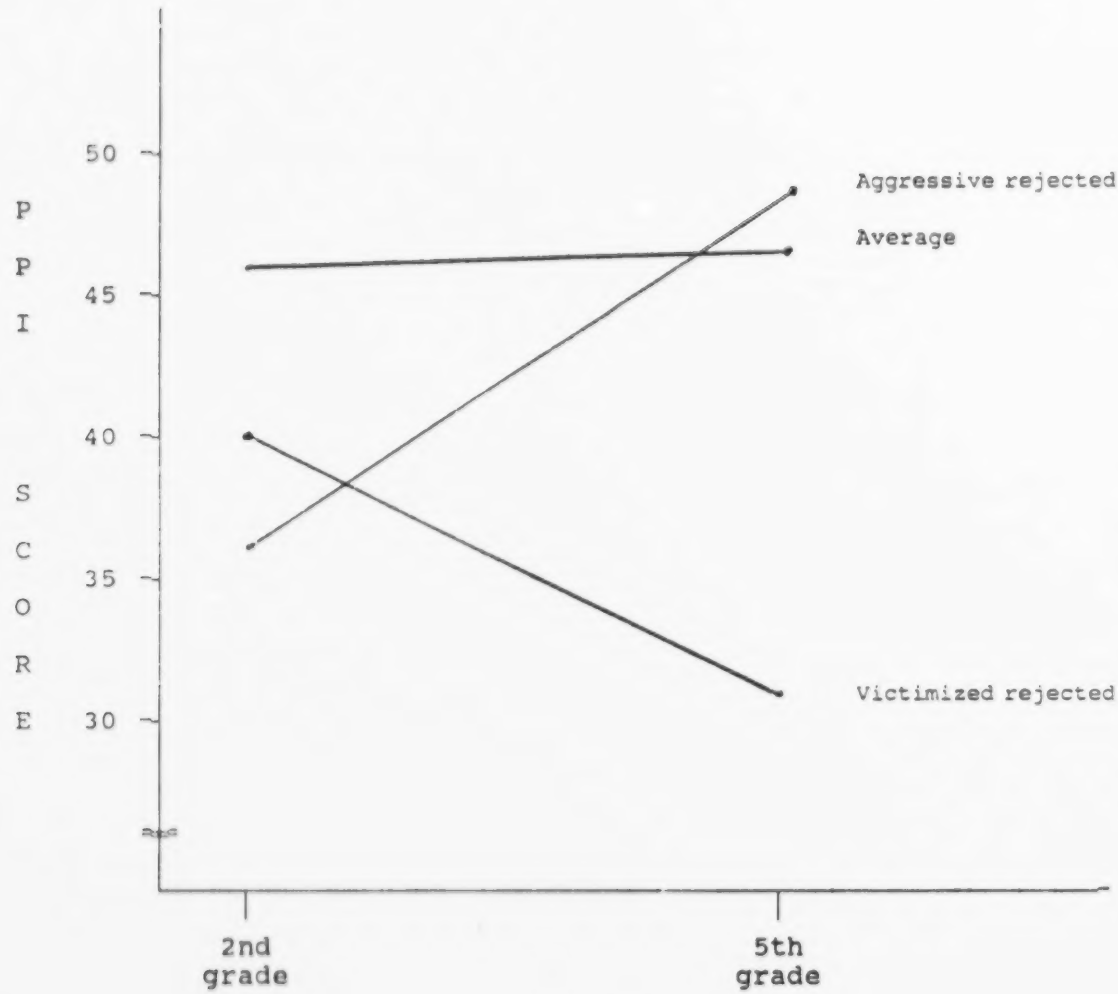

Table 5

Means Depression Scores by Status

	Grade 2	Grade 5
Average	32	28
Popular	31	26
Aggressive rejected	29	28
Victimized rejected	31	33
Regular rejected	32	29

Scores are rounded to nearest whole number

Standard deviation = 4.00 for Grade 2 and 5.00 for Grade 5